70.8°, +1.0°; Mississippi area, 72.9°, +1.4°; Louisiana, 74.4°, +0.4°.

PRECIPITATION BY DRAINAGE AREAS.

Arkansas River and tributaries.—Less than the normal amount of precipitation occurred throughout this drainage area, except in New Mexico and at scattered stations in Colorado and western and central Kansas. Over the headwaters of the Arkansas River, in Colorado, the average from 37 stations was 1 inch, being about 1.2 inches below the normal. Over those portions of the Arkansas Valley proper that lie in Kansas and Oklahoma the precipitation was unevenly distributed, being generally above the normal in Kansas and below in Oklahoma; the average from 43 stations was 3.56 inches, about 1.2 inches below the normal. The average from 19 stations in the Cimarron Valley was 3.03 inches, about 0.7 inch below the normal. The precipitation was uniformly distributed over the headwaters of the Canadian River, in New Mexico, the average from 38 stations being 2.76 inches, about 1.4 inches above the normal. Over those stretches of the Canadian Valley that lie in Texas and Oklahoma the precipitation was unevenly distributed, ranging from less than 1 inch to more than 5 inches; the average from 30 stations was 3.32 inches, about half the normal amount. The precipitation from 9 stations in the Verdigris Valley averaged 2.26 inches and the average deficiency was about 3.1 inches. In the Neosho Valley the average from 18 stations was 2.38 inches, about 3.4 inches below the normal. Over that portion of the Arkansas Valley below the Oklahoma-Arkansas line the precipitation was unusually light, the average from 15 stations being 1.10 inches, about 4.6 inches below the normal.

Red River and tributaries.—Heavy precipitation occurred in a few widely scattered localities over this drainage area, but generally the amounts were small. Over those portions of the Red River Valley that lie in New Mexico, Texas, and Oklahoma the precipitation from 41 stations averaged 2.45 inches, about 3.1 inches below the normal. Less precipitation occurred in the Red River Valley below the Texas-Arkansas line, where the amounts from 18 stations averaged 1.85 inches, about 2.9 inches below the normal.

Mississippi south of St. Louis and small tributaries.—Very little precipitation occurred during the month in this drainage area, but the amounts for the several valleys and the departures from the normal vary materially. In the immediate Mississippi Valley the amounts from 43 stations averaged 1.04 inches, about 3.5 inches below the normal. Over the valley of the Meramec the precipitation averaged about 4 inches below normal. The average precipitation from 22 stations in the White River Valley was only 0.85 inch and the average deficiency was about 4.4 inches. The average from 30 stations in the Yazoo Valley was 1.89 inches, about 2.5 inches below the normal, and the average for the valley of the Big Black was 1.12 inches, about 3.3 inches below the normal. Over the Ouachita Valley the average from 21 stations was 1.24 inches, about 3.6 inches below the normal.

Louisiana coastal plain.—More than the normal precipitation occurred at a few scattered stations, but generally there was a deficiency. The average from 31 stations was 3.45 inches, about 0.8 inch below the normal.

Monthly precipitation and departures from the normal for the various States and parts of States, in inches are reported as follows: Colorado area, 1.10, −0.98; New Mexico area, 2.74, +1.25; Texas area, 3.02, −2.16; Kansas area, 3.47, −0.78; Oklahoma, 2.61, −3.80; Missouri area, 0.87, −4.08; Tennessee area, 1.35, −2.75; Arkansas, 1.11, −4.28; Mississippi area, 1.73, −2.68; Louisiana, 2.82, −1.40.

SNOWFALL.

The snowfall during the month was confined to the more elevated portions of the Colorado and New Mexico areas, except that a trace was recorded at 1 station in north-central Kansas. The amounts ranged from a trace to 11 inches, but owing to the high temperatures none of this remained upon the ground sufficiently long to be of use for purposes of irrigation. The average snowfall, in inches, for the various States and parts of States, derived from the records of such stations as reported snow, is as follows: Colorado area, 20 stations, 2.8 inches; New Mexico area, 10 stations, 1.4 inches; Kansas area, 1 station, trace.

RIVERS.

Only slight changes occurred in the Red River proper, but the Washita in Oklahoma rose rapidly during the closing days of the month as the result of heavy rains over the upper portion of that watershed.

There was a decided rise in the Canadian River during the latter part of the month due to heavy rains at its headwaters and over the Texas Panhandle and northwestern Oklahoma.

No decided rise occurred in the Cimarron during the month.

During May the volume of water discharged by the Arkansas in its upper reaches in Colorado was very close to normal. On the 2d a change from the low stage that prevailed throughout April began and lasted for a few days. Another rise was in progress at the close of the month. The Arkansas River continued low in Kansas, Oklahoma, and Arkansas. At Little Rock the water fell steadily from a stage of 9 feet on the 1st to 1.5 feet on the 24th, this being the lowest recorded in May during the last 32 years. The river was not navigable during the second and third decades.

Relatively high stages prevailed in the upper White River during the first decade, after which there was a steady fall and low stages prevailed at the close of the month. The lower White was 28.6 feet at Clarendon on May 1, after which there was a steady fall to 15 feet on the 31st.

There was a steady fall in the upper Ouachita at Camden from 31.4 feet on the 1st to 5.8 feet on the 29th. The lower Ouachita remained nearly stationary at Monroe, with stages ranging from 29 to 36 feet.

Below St. Louis high water prevailed in the Mississippi River at the opening of the month. At Memphis, Tenn., and Helena, Ark., there was a steady fall during the month, but the rise in progress at the close of April continued during the greater part of the first decade at stations below Arkansas City, after which there was a steady fall. The water was above the flood stage at Memphis on the 1st; Helena, 1st–2d; and Arkansas City, 1st–6th. From Vicksburg to the Gulf no flood stages occurred.

NOTES.

Fort Union, N. Mex. (M. C. Needham).—Range and crop conditions are very satisfactory. The hail of the 13th did considerable damage at this station, breaking window glass and shingles. Many young calves were killed during the storm.

Rociada, N. Mex. (Alice Blake).—Heavy hailstorms and rains passed near this station on the 14th and 29th.

New Mexico (C. E. Linney, section director).—Killing frosts occurred quite generally on May 1 and 11. Many stations reported hail on the 13th, 14th, 28th, and 29th.

Oklahoma (J. Pemberton Slaughter, section director).—Weather conditions were decidedly unfavorable during May, there being less than half the normal rainfall. Clear skies and high day temperatures prevailed, except during the first few days of the month.

Wichita, Kans.—The drought which has continued with varying intensity since February was relieved by good rains during the latter part of the month.

Missouri (George Reeder, section director).—Over considerable areas in southern Missouri no rain has occurred during six consecutive weeks. Pastures are brown, meadows dried up, the oat crop is a total failure, and wheat is badly damaged. The berry crop is very poor, and the melons have suffered as a result of the drought. Corn, where up, is looking well.

Arkansas (H. F. Alciatore, section director).—Unseasonably cold weather prevailed during the first week in May. The weather during the last 10 days of the month was abnormally warm, the maximum temperature for the State, 101°, surpassing all previous records. The precipitation was the smallest of record for May during the last 21 years.

Canton, Miss.—The high temperatures of the closing week and the light rainfall for the month broke all previous May records.